



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,651	03/23/2004	Stephen V. Saliga	72255/00019	2573
23380	7590	12/07/2007		
TUCKER ELLIS & WEST LLP			EXAMINER	
1150 HUNTINGTON BUILDING				YUN, EUGENE
925 EUCLID AVENUE			ART UNIT	PAPER NUMBER
CLEVELAND, OH 44115-1414			2618	
			NOTIFICATION DATE	DELIVERY MODE
			12/07/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@tuckerellis.com
mary.erne@tuckerellis.com

Office Action Summary	Application No.	Applicant(s)	
	10/806,651	SALIGA ET AL.	
	Examiner	Art Unit	
	Eugene Yun	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 25 September 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4,6-13,15-24 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4,6-13,15-24 and 27 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 23 March 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-13, 15-24, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Proctor et al. (US 7,233,627) in view of Neagley et al. (US 6,434,372).

Referring to Claim 1, Proctor teaches a configurable antenna system comprising:

An antenna arrangement configured to selectively vary between first and second operational positions (see col. 5, lines 37-41);

Wherein in the first operational position, the antenna arrangement operates in an omni-operational antenna mode (see col. 5, line 40); and

Wherein the second operational position, the antenna arrangement operates in a directional antenna mode (see col. 5, line 41).

Proctor does not teach a signal reflecting member positioned to cooperate with the antenna arrangement while the antenna arrangement is in the second operational position, to establish a directional antenna mode configuration that is perpendicular to the signal reflecting member, and a pivot member coupled to the antenna arrangement for pivotally varying the antenna between the first and second operational positions.

Neagley teaches a signal reflecting member positioned to cooperate with the antenna

arrangement while the antenna arrangement is in the second operational position, to establish a directional antenna mode configuration that is perpendicular to the signal reflecting member (see col. 6, lines 14-23), and a pivot member coupled to the antenna arrangement for pivotally varying the antenna between the first and second operational positions (see col. 11, lines 49-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Neagley to said device of Proctor in order to provide a more clear reflected signal while reducing radiation.

Referring to Claim 10, Proctor teaches a wireless access point for a wireless local area network comprising:

A radio component comprising suitable radio electronics circuitry for converting electronic signals back and forth into wireless radio frequency signals (see 100 in fig. 1);

An antenna arrangement for transmitting and receiving the wireless radio frequency signals, and configured to selectively vary between first and second operational positions (see col. 5, lines 37-41);

Wherein in the first operational position, the antenna arrangement operates in an omni-directional antenna mode (see col. 5, line 40); and

Wherein in the second operational position, the antenna arrangement operates in a directional antenna mode (see col. 5, line 41).

Proctor does not teach a signal reflecting member positioned to cooperate with the antenna arrangement while the antenna arrangement is in the second operational position, to establish a directional antenna mode configuration that is perpendicular to

the signal reflecting member, and a pivot member coupled to the antenna arrangement for pivotally varying the antenna between the first and second operational positions.

Neagley teaches a signal reflecting member positioned to cooperate with the antenna arrangement while the antenna arrangement is in the second operational position, to establish a directional antenna mode configuration that is perpendicular to the signal reflecting member (see col. 6, lines 14-23), and a pivot member coupled to the antenna arrangement for pivotally varying the antenna between the first and second operational positions (see col. 11, lines 49-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Neagley to said device of Proctor in order to provide a more clear reflected signal while reducing radiation.

Referring to Claim 20, Proctor teaches a method of antenna operation in a wireless telecommunications system comprising:

Operating an antenna arrangement in an omni-directional mode while the antenna arrangement is in a first position (see col. 5, line 40); and

Operating the antenna arrangement in a directional antenna mode while the antenna arrangement is in a second position (see col. 7, lines 62 to col. 8, line 4).

Proctor does not teach the antenna arrangement substantially perpendicular with a signal reflecting member while in the first position, and the antenna arrangement substantially parallel with the signal reflecting member while in the second position, wherein the signal reflecting member reflects signal from the antenna arrangement in a direction that is substantially perpendicular to the reflecting member while the antenna

arrangement is in the second position. Neagley teaches the antenna arrangement substantially perpendicular with a signal reflecting member while in the first position (see col. 6, lines 14-23), and the antenna arrangement substantially parallel with the signal reflecting member while in the second position, wherein the signal reflecting member reflects signal from the antenna arrangement in a direction that is substantially perpendicular to the reflecting member while the antenna arrangement is in the second position (see col. 11, lines 39-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Neagley to said device of Proctor in order to provide a more clear reflected signal while reducing radiation.

Referring to Claims 2, 11, and 21, Proctor also teaches a diversity pair of omni-directional antennas (see fig. 5A).

Referring to Claims 3, 12, and 22, Proctor also teaches the diversity pair of omni-directional antennas formed on a circuit board (see col. 5, lines 1-10).

Referring to Claims 4, 13, and 23, Proctor also teaches a switch for detecting whether the antenna arrangement is in a respective one of the first operational position, for enabling the omni-directional antenna mode, and the second operational position, for enabling the directional operational mode (see col. 6, lines 43-48).

Referring to Claim 24, Neagley also teaches a pivot member for pivotally varying the antenna arrangement between the first and second antenna positions (see col. 11, lines 49-56).

Referring to Claims 6 and 15, Neagley also teaches the antenna arrangement in the first operational position substantially perpendicular with respect to the signal reflecting member (see col. 6, lines 14-23), and wherein the antenna arrangement in the second operational position substantially parallel with respect to the signal reflecting member (see col. 11, lines 39-53).

Referring to Claims 7, 16 and 27, Proctor also teaches that in the second operation position, the antenna arrangement is substantially proximate to the signal reflecting member, to provide a signal reflection from the antenna arrangement (see col. 7, lines 62 to col. 8, line 4).

Referring to Claims 8 and 17, Proctor also teaches the signal reflecting member formed integrally with a metal and reflective access point housing (see col. 7, lines 62 to col. 8, line 4).

Referring to Claim 9, Proctor also teaches the antenna system incorporated in a wireless access point for use with a wireless local area network (see col. 7, lines 55-61).

Referring to Claim 18, Proctor also teaches the radio component comprising means for converting signals between a wireless protocol and a wired network protocol (see col. 6, line 63 to col. 7, line 15).

Referring to Claim 19, Proctor also teaches converting signals from between the IEEE 802.11 wireless protocol and the IEEE 802.3 wired network protocol (see col. 6, line 63 to col. 7, line 15).

Response to Arguments

3. Applicant's arguments with respect to claims 1-4, 6-13, 15-24, and 27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugene Yun whose telephone number is (571) 272-7860. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571)272-4177. The fax phone

Application/Control Number:
10/806,651
Art Unit: 2618

Page 8

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eugene Yun
Examiner
Art Unit 2618

EY



MATTHEW ANDERSON
SUPERVISORY PATENT EXAMINER